

REMARKS

The final Office Action mailed July 11, 2007, has been received and reviewed. As of the July 11, 2007 Office Action, Claims 1-14 were pending and presently stand rejected. Applicant has amended Claims 1, 4, 5, 7, 11 and 14, herein. As of this FOURTH AMENDMENT AND RESPONSE, Claims 1-14 are believed to be in condition for allowance and Applicant respectfully requests reconsideration of the application as amended herein.

Substance of Interview

An Examiner Interview was conducted telephonically, July 24, 2007 between Applicant's counsel, Paul C. Oestreich, the first named inventor, Steven R. Lindsey, and Examiner Rhonda L. Murphy. The invention was outlined by Mr. Lindsey. Perceived distinctions over the prior art and possible claim amendments were discussed. No agreement was reached.

35 U.S.C. § 103(a) Obviousness Rejections

M.P.E.P. 706.02(i) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Obviousness Rejection Based on U.S. Patent No. 4,293,740 to Gibb et al. in view of U.S. Patent No. 4,996,709 to Heep et al.

The Examiner has rejected Claims 1-14 under 35 U.S.C. § 103(a) as being unpatentable over Gibb et al. in view of Heep et al.

The Gibb et al. device is a conventional analog intercom system configured for transmitting "a.c. voice band signals" under the control of "a d.c. control signal". Col. 2:14-29. FIG. 2 of Gibb et al. is an analog loudspeaker circuit for converting the voice band signals from twisted pair 84a, 84b to loudspeaker 85. It is well known that voice band signals used in conventional telephony are frequency band limited to 4kHz or less. See for example, Heep et al., Col. 2:24-26. Compact disc quality audio is not limited to 4kHz but rather 22kHz or less, which provides a rich high-fidelity sound quality. Thus, Gibb et al. is not capable of transmitting "compact disc quality digital audio signals" between its "key telephone station sets" 10a, 10b, see e.g., FIG. 1.

The Heep et al. device is also a conventional analog intercom system configured for transmitting frequency modulated voice band signals on voice channels under control of a separate digital control channel. Col. 3:14 to Col 4:2 and Col. 5:45-49. Digital signaling (control signals) in Heep et al. may be achieved by a dedicated digital signaling channel using modulator 16 and demodulator 36 under microprocessor 44 control. FIG. 2. According to another implementation in Heep et al., the digital signaling may occupy the 0-300Hz band of the voice band, while the voice signal occupies the 300-4kHz portion of the voice band. Col. 5:1-20. While Heep et al. does disclose digital control signaling, it does not disclose transmission of "compact disc quality digital audio signals" between its telephone stations, 1, FIG. 1.

Applicant has amended Claim 1, to clarify and more distinctly claim the invention. More precisely, amended Claim 1 now recites:

1. (Currently Amended) A digital media network station,
comprising:
a digital media transceiver configured for sending and receiving *compact disc quality digital audio signals* over a digital media bus;
a data transceiver for sending and receiving control signals over a control
bus;
a processor in communication with said digital media transceiver and said

data transceiver for arbitrating transmission and reception of said *compact disc quality digital audio signals* based on said control signals and preventing media signal collisions from occurring on said digital media bus; and
wherein said digital media network station is configured for wall mounting.
(Emphasis on added limitations.)

Support for the “compact disc quality digital audio signals” limitation may be found in the specification at paragraphs [0019] and [0022]. As noted above, neither Gibb et al. nor Heep et al. disclose transmission of “compact disc quality digital audio signals” over a digital media bus as recited in Claim 1. Furthermore, there is no suggestion or motivation to transmit high-fidelity audio or music in the devices of Gibb et al. and Heep et al. because voice signals do not require bandwidth more than 4kHz to be audible. Indeed the objects of the invention for Heep et al. invention were to (1) implement an intercom on the same channel or wire pair used for telephone communications, (2) utilize frequency modulation to achieve multiple voice channels on a single wire pair, and (3) to improve control and access to the intercom channel. Col. 1:23-36. Likewise, the object of the Gibb et al. invention was “to improve an intercom communication facility by providing a hands free mode of operation”. Col. 1:64-66. Noticeably absent from either Heep et al. or Gibb et al. is any mention of digital transmission of compact disc quality audio signals between stations.

Thus, amended Claim 1 is no longer obvious over Gibb et al. in view of Heep et al. Claims 2-6 depend from amended Claim 1 and are, thus, also believed to be nonobvious over Gibb et al. in view of Heep et al., for the same reasons.

Regarding Claim 2, neither Gibb et al. nor Heep et al. appear to disclose “a switchable media bus termination network between said digital media transceiver and said digital media bus for balancing transmissions on said digital media bus” as recited in Claim 2. Rather Gibb et al. makes no mention of any bus termination network. FIGS. 1-2. Similarly, Heep et al. is also silent as to the use of “switchable media bus

termination". For this additional reason, Claim 2 is patentable over Gibb et al. in view of Heep et al.

Applicant has also amended Claim 4 to more precisely claim the invention recited therein. More specifically, amended Claim 4 now recites:

4. (Currently Amended) The digital media network station according to claim 1, further comprising a media output connection in communication with said digital media transceiver for interconnecting received *compact disc quality digital audio signals* with an external media device. (Emphasis on added limitation.)

Neither Heep et al. nor Gibb et al. disclose "a media output connection in communication with said digital media transceiver for interconnecting received *compact disc quality digital audio signals* with an external media device" as recited in Claim 4. For this additional reason, amended Claim 4 is patentable over Gibb et al. in view of Heep et al.

Applicant has also amended Claim 5 to clarify the recitation of the invention therein. More specifically, amended Claim 5 now recites:

5. (Currently Amended) The digital media network station according to claim 1, further comprising a media input connection in communication with said digital media transceiver for interconnecting an external media device with said digital media transceiver for *compact disc quality digital audio signal* transmission over said digital media bus. (Emphasis on added limitation.)

Neither Heep et al. nor Gibb et al. disclose "a media input connection in communication with said digital media transceiver for interconnecting an external media device with said digital media transceiver for *compact disc quality digital audio signal*

transmission over said digital media bus” as recited in amended Claim 5. For this additional reason, amended Claim 5 is patentable over Gibb et al. in view of Heep et al.

Applicant has also amended Claim 7 to clarify the recitation of the invention therein. More specifically, amended Claim 7 now recites:

7. (Currently Amended) A digital media network system, comprising:
a digital media bus;
a control bus; and
a plurality of digital media network stations connected to said digital media bus and said control bus, each digital media network station comprising:
a digital media transceiver configured for sending and receiving
compact disc quality digital audio signals over said digital media bus;
a data transceiver for sending and receiving control signals over said control bus;
a processor in communication with said digital media transceiver and said data transceiver for arbitrating transmission and reception of said *compact disc quality digital audio signals* based on said control signals and preventing media signal collisions from occurring on said digital media bus; and
wherein each said digital media network station is configured for wall mounting. (Emphasis on added limitations.)

Neither Heep et al. nor Gibb et al. disclose “a digital media network system, comprising: ... a digital media transceiver configured for sending and receiving *compact disc quality digital audio signals* over said digital media bus” and “a processor in communication with said digital media transceiver and said data transceiver for arbitrating transmission and reception of said *compact disc quality digital audio signals*

based on said control signals and preventing media signal collisions from occurring on said digital media bus" as recited in amended Claim 7.

Rather, Gibb et al. discloses "a hybrid circuit including first and second unidirectional signal paths for coupling a.c. [alternating current] signals between the intercom lead pair and the signaling lead." Likewise, Heep et al. discloses transmission of "voice signals on two or more frequency modulated channels over a wire pair of a local telephone network." Abstract. For this reason, amended Claim 7 is patentable over Gibb et al. in view of Heep et al. Claims 8-10 depend from amended Claim 7 and are, thus, also believed to be patentable over Gibb et al. in view of Heep et al. for the same reason.

Regarding Claim 10, neither Gibb et al. nor Heep et al. disclose the limitation "wherein said digital media bus comprises a plurality of digital media buses" as recited in Claim 10. Rather, Gibb et al. discloses a single "pair of intercom leads for carrying voice band signals". Col. 2:7-8; 16 in FIG. 1. Likewise, Heep et al. discloses voice signal transmission on a single wire pair. Heep et al. achieves multiple voice channels by frequency modulation on a single wire pair. Thus, neither Gibb et al. nor Heep et al. discloses or suggests multiple buses or wire pairs as recited in Claim 10. For this additional reason Claim 10 is patentable over Gibb et al. in view of Heep et al.

Regarding Claim 11, Applicant has amended Claim 11 to more precisely recite the invention therein. More specifically, amended Claim 11 now recites the added limitation: "a digital media bus *configured for transmission of compact disc quality digital audio signals.*" As noted above, neither Gibb et al. nor Heep et al. disclose a bus configured for transmission of CD quality digital audio signals.

Furthermore, neither Gibb et al. nor Heep et al. disclose creating, sending, parsing or executing a control packet as recited in amended Claim 11. In fact, the word "packet" cannot be found in either reference using a word search. Heep et al. discloses sending a "signaling message to the target unit which will then respond with an acknowledge message. The two units select the voice channel or channels to be utilized and establish the voice communications link on the selected frequency channel." Col. 4:27-33. Thus,

4:27-33. Thus, the “signaling message” of Heep et al. only contains source and destination information. There is no disclosure in Heep et al. regarding a “system-wide broadcast command” or executing same as recited in Claim 11.

For this additional reason, amended Claim 11 is patentable over Gibb et al. in view of Heep et al. Claims 12-13 depend from amended Claim 11 and are, thus, also believed to be patentable over Gibb et al. in view of Heep et al. for the same reasons.

Regarding Claim 12, neither Gibb et al. nor Heep et al. disclose “executing a handshake *and said media network station-specific command* or else timing out” as recited in Claim 12, emphasis added. Heep et al. discloses handshaking between known stations (source and destination) to set up a connection, but not executing a media network station-specific command. Col. 4:27-37. For this additional reason, Claim 12 is patentable over Gibb et al. in view of Heep et al.

Similarly, regarding Claim 13, neither Gibb et al. nor Heep et al. disclose “validating a response to ensure correct processing of said media network station-specific command” as recited in Claim 13. Heep et al. merely performs handshaking to establish connectivity and does not teach confirmation that the command was executed. For this additional reason, Claim 13 is patentable over Gibb et al. in view of Heep et al.

Applicant has amended Claim 14 to more precisely recite the invention therein. More specifically, amended Claim 14 now recites: “said one of said at least three digital media network stations transmitting *compact disc quality digital audio signals* to all other of said at least three digital media network stations if said digital media bus is not being used”. As noted above, neither Gibb et al. nor Heep et al. disclose transmission of CD quality digital audio signals.

For all of the above reasons, Claims 1-14 as amended herein are believed to be nonobvious over Gibb et al. in view of Heep et al. Applicant respectfully requests reconsideration of the obviousness rejection based on Gibb et al. in view of Heep et al.

CONCLUSION

Claims 1-14 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicants' undersigned attorney.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 50-0881.

Respectfully Submitted,



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